

SEQUENCE LISTING

<110> Rothman, James
Mayhew, Mark
Hoe, Mee

<120> KDEL RECEPTOR INHIBITORS

<130> 31488

<140> US 09/124,671

<141> 1998-07-29

<160> 42

<170> FastSEQ for Windows Version 3.0

<210> 1

<211> 46

<212> PRT

<213> Ratus ratus

<400> 1

Gly	Asp	Leu	Ala	Pro	Gln	Met	Leu	Arg	Glu	Leu	Gln	Glu	Thr	Asn	Ala
1				5					10					15	
Ala	Leu	Gln	Asp	Val	Arg	Glu	Leu	Leu	Arg	Gln	Gln	Val	Lys	Glu	Ile
			20					25					30		
Thr	Phe	Leu	Lys	Asn	Thr	Val	Met	Glu	Cys	Asp	Ala	Cys	Gly		
			35				40						45		

<210> 2

<211> 46

<212> PRT

<213> Homo sapiens

<400> 2

Ser	Asp	Leu	Gly	Pro	Gln	Met	Leu	Arg	Glu	Leu	Gln	Glu	Thr	Asn	Ala
1				5					10					15	
Ala	Leu	Gln	Asp	Val	Arg	Asp	Trp	Leu	Arg	Gln	Gln	Val	Arg	Glu	Ile
			20					25					30		
Thr	Phe	Leu	Lys	Asn	Thr	Val	Met	Glu	Cys	Asp	Ala	Cys	Gly		
			35				40						45		

<210> 3

<211> 46

<212> PRT

<213> Mus musculus

<400> 3

Gly	Glu	Gln	Thr	Lys	Ala	Leu	Val	Thr	Gln	Leu	Thr	Leu	Phe	Asn	Gln
1				5					10					15	

<400> 8
 Leu Leu Leu Gly Thr Leu Asn Ile Val
 1 5

<400> 9
 Leu Leu Met Gly Thr Leu Gly Ile Val
 1 5

```

      <400> 10
Thr Leu Gln Asp Ile Val Leu His Leu
 1               5

```

<400> 11
Gly Leu His Cys Tyr Glu Gln Leu Val
1 5

```

      <400> 12
Pro  Leu  Lys  Gln  His  Phe  Gln  Ile  Val
   1                               5

```

<220>

<223> chimeric rat comp

<400> 13

```
Met Gly Lys Phe Thr Val Val Ala Ala Ala Leu Leu Leu Leu Gly Ala
 1          5          10          15
Val Arg Ala Glu Gly Ser Ser Leu Gly Gly Asp Leu Ala Pro Gln Met
          20          25          30
Leu Arg Glu Leu Gln Glu Thr Asn Ala Ala Leu Gln Asp Val Arg Glu
          35          40          45
Leu Leu Arg Gln Gln Val Lys Glu Ile Thr Phe Leu Lys Asn Thr Val
          50          55          60
Met Glu Cys Asp Ala Cys Gly Met Gln Pro Ala Arg Thr Pro Gly Thr
65          70          75          80
Ser Pro Gln Pro Gln Pro Lys Pro Gln Pro Gln Pro Gln Pro Gln Pro
          85          90          95
Lys Pro Gln Pro Lys Pro Glu Pro Glu Gly Thr Gly Ser Ser Glu Lys
          100          105          110
Asp Glu Leu
          115
```

<210> 14

<211> 387

<212> DNA

<213> Artificial Sequence

<220>

<223> chimeric rat COMP-KDEL

<400> 14

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aagcttacca tgggaaagtt cactgtggtg gcggcggcgt tgctgctgct gggcgcggtg      60
cgggccgagg gatccagcct ggggtggagac ctagcccccac agatgcttcg agaactccag      120
gagactaatg cggcgctgca agacgtgaga gagctcttgc gacagcaggt caaggagatc      180
accttctctga agaatacggg gatggaatgt gacgcttgcg gaatgcagcc cgcacgcacc      240
cccgttacta gtccgcagcc gcagccgaaa ccgcagccgc agccgcagcc gcagccgaaa      300
ccgcagccga aaccggaacc ggaaggtacc ggatcatcag aaaaagatga gttgtaggcg      360
gccgcagaat tccatatgca tctcgag                                     387
```

<210> 15

<211> 115

<212> PRT

<213> Artificial Sequence

<220>

<223> chimeric rat COMP-KDEL

<400> 15

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Met Gly Lys Phe Thr Val Val Ala Ala Ala Leu Leu Leu Leu Gly Ala
 1          5          10          15
Val Arg Ala Glu Gly Ser Ser Leu Gly Gly Asp Cys Cys Pro Gln Met
          20          25          30
Leu Arg Glu Leu Gln Glu Thr Asn Ala Ala Leu Gln Asp Val Arg Glu
          35          40          45
Leu Leu Arg Gln Gln Val Lys Glu Ile Thr Phe Leu Lys Asn Thr Val
```

Do you have a question about your car's performance?
Do you want to know more about the latest in car technology?
Do you want to know more about the latest in car safety?
Do you want to know more about the latest in car comfort?
Do you want to know more about the latest in car reliability?
Do you want to know more about the latest in car value?
Do you want to know more about the latest in car financing?
Do you want to know more about the latest in car leasing?
Do you want to know more about the latest in car insurance?
Do you want to know more about the latest in car maintenance?
Do you want to know more about the latest in car repairs?
Do you want to know more about the latest in car accessories?
Do you want to know more about the latest in car customization?
Do you want to know more about the latest in car performance?
Do you want to know more about the latest in car technology?
Do you want to know more about the latest in car safety?
Do you want to know more about the latest in car comfort?
Do you want to know more about the latest in car reliability?
Do you want to know more about the latest in car value?
Do you want to know more about the latest in car financing?
Do you want to know more about the latest in car leasing?
Do you want to know more about the latest in car insurance?
Do you want to know more about the latest in car maintenance?
Do you want to know more about the latest in car repairs?
Do you want to know more about the latest in car accessories?
Do you want to know more about the latest in car customization?

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<220>
<223> chimeric rat COMP-KDEL
```

```
<210> 17
<211> 105
<212> PRT
<213> Artificial Sequence
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```
<220>
<223> chimeric mouse TSP3-KDEL
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$\langle 210 \rangle$	18
$\langle 211 \rangle$	357

<212> DNA
<213> Artificial Sequence

<220>
<223> chimeric mouse TSP3-KDEL

<400> 18
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cgggccgagg gatccagcct ggggtggagac tgttgtaagg cattggtcac ccagctcacc 120
ctcttcaacc agatcctagt ggagcttcgg gacgacatcc gagaccaggt gaaggaaatg 180
tcaactcatcc ggaacacccat catggagtgt caggtgtgctg gtccgcagcc gcagccgaaa 240
ccgcagccgc agccgcagcc gcagccgaaa ccgcagccga aaccggaacc ggaaggtacc 300
ggatcatcag aaaaagatga gttgtaggcg gccgcagaat tccatatgca tctcgag 357

<210> 19
<211> 109
<212> PRT
<213> Artificial Sequence

<220>
<223> chimeric mouse TSP3-KDEL

<400> 19
Met Gly Lys Phe Thr Val Val Ala Ala Ala Leu Leu Leu Leu Gly Ala
1 5 10 15
Val Arg Ala Glu Gly Ser Ser Leu Gly Gly Asp Cys Cys Gly Glu Gln
20 25 30
Thr Lys Ala Leu Val Thr Gln Leu Thr Leu Phe Asn Gln Ile Leu Val
35 40 45
Glu Leu Arg Asp Asp Ile Arg Asp Gln Val Lys Glu Met Ser Leu Ile
50 55 60
Arg Asn Thr Ile Met Glu Cys Gln Val Cys Gly Pro Gln Pro Gln Pro
65 70 75 80
Lys Pro Gln Pro Gln Pro Gln Pro Gln Pro Lys Pro Gln Pro Lys Pro
85 90 95
Glu Pro Glu Gly Thr Gly Ser Ser Glu Lys Asp Glu Leu
100 105

<210> 20
<211> 369
<212> DNA
<213> Artificial Sequence

<220>
<223> chimeric mouse TSP3-KDEL

<400> 20
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cgggccgagg gatccagcct ggggtggagac tgttggtggg agcagaccaa ggcattggtc 120
accagctca ccctcttcaa ccagatccta gtggagcttc gggacgacat ccgagaccag 180
gtgaaggaaa tgtcactcat ccggaacacc atcatggagt gtcaggtgtg cggtcgcag 240
ccgcagccga aaccgcagcc gcagccgcag ccgcagccga aaccgcagcc gaaaccgga 300
ccggaaggta ccggatcatc agaaaaagat gagttgtagg cggccgcaga attccatatg 360

<210> 21
 <211> 109
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chimeric *Xenopus laevis* TSP4-KDEL

<400> 21
 Met Gly Lys Phe Thr Val Val Ala Ala Ala Leu Leu Leu Leu Gly Ala
 1 5 10 15
 Val Arg Ala Glu Gly Ser Ser Leu Gly Gly Asp Cys Cys Gly Asp Val
 20 25 30
 Ser Arg Gln Leu Ile Gly Gln Ile Thr Gln Met Asn Gln Met Leu Gly
 35 40 45
 Glu Leu Arg Asp Val Met Arg Gln Gln Val Lys Glu Thr Met Phe Leu
 50 55 60
 Arg Asn Thr Ile Ala Glu Cys Gln Ala Cys Gly Pro Gln Pro Gln Pro
 65 70 75 80
 Lys Pro Gln Pro Gln Pro Gln Pro Gln Pro Lys Pro Gln Pro Lys Pro
 85 90 95
 Glu Pro Glu Gly Thr Gly Ser Ser Glu Lys Asp Glu Leu
 100 105

<210> 22
 <211> 369
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chimeric *Xenopus laevis* TSP4-KDEL

<400> 22
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 cgggccgagg gatccagcct gggaggagac tgttggtggtg acgtcagcag acagttgatt 120
 ggccagataa cccaaatgaa tcagatgctg ggagagctcc gagatgtcat gagacagcag 180
 gtgaaagaga ccatgttctt gagaaacacc attgcagaat gccaggcctg tggcccgcag 240
 ccgcagccga aaccgcagcc gcagccgcag ccgcagccga aaccgcagcc gaaaccggaa 300
 ccggaaggta ccggatcatc agaaaaagat gagttgtagg cggccgcaga attccatatg 360
 catctcgag 369

<210> 23
 <211> 109
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chimeric human COMP-KDEL

<400> 23
 Met Arg Tyr Met Ile Leu Gly Leu Leu Ala Leu Ala Ala Val Cys Ser

1 5 10 15
 Ala Ala Lys Lys Gly Ser Ser Leu Gly Gly Asp Cys Cys Ser Asp Leu
 20 25 30
 Gly Pro Gln Met Leu Arg Glu Leu Gln Glu Thr Asn Ala Ala Leu Gln
 35 40 45
 Asp Val Arg Asp Trp Leu Arg Gln Gln Val Arg Glu Ile Thr Phe Leu
 50 55 60
 Lys Asn Thr Val Met Glu Cys Asp Ala Cys Gly Pro Gln Pro Gln Pro
 65 70 75 80
 Lys Pro Gln Pro Gln Pro Gln Pro Gln Pro Lys Pro Gln Pro Lys Pro
 85 90 95
 Glu Pro Glu Gly Thr Gly Ser Ser Glu Lys Asp Glu Leu
 100 105

<210> 24
 <211> 372
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> chimeric human COMP-KDEL

<400> 24
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 gctgccaaaa aaggatccag cctgggtgga gactgttggt cagacctggg cccgcagatg 120
 cttcggaac tgcaggaaac caacgcggcg ctgcaggacg tgcgggactg gctgcggcag 180
 caggtcaggg agatcacgtt cctgaaaaac acggtgatgg agtgtgacgc gtgcggggccg 240
 cagccgcagc cgaaaccgca gccgcagccg cagccgcagc cgaaaccgca gccgaaaccg 300
 gaaccggaag gtaccggatc atcagaaaaa gatgagttgt aggcggccgc agaattccat 360
 atgcattctg ag 372

<210> 25
 <211> 90
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> chimeric human PLB-KDEL

<400> 25
 Met Arg Tyr Met Ile Leu Gly Leu Leu Ala Leu Ala Val Cys Ser
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 Ala Ala Lys Lys Gly Ser Ser Leu Gly Gly Asp Cys Cys Gln Lys Leu
 20 25 30
 Gln Asn Leu Phe Ile Asn Phe Cys Leu Ile Leu Ile Cys Leu Leu Leu
 35 40 45
 Ile Cys Ile Ile Val Met Leu Leu Pro Gln Pro Gln Pro Lys Pro Gln
 50 55 60
 Pro Gln Pro Gln Pro Gln Pro Lys Pro Gln Pro Lys Pro Glu Pro Glu
 65 70 75 80
 Gly Thr Gly Ser Ser Glu Lys Asp Glu Leu
 85 90

1. The first group of people who are not in the majority are those who are not in the majority.

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<220>
<223> chimeric human TSP4-KDEL
```

```
<210> 30
<211> 372
<212> DNA
<213> Artificial Sequence
```

<220>
<223> chimeric human TSP4-KDEL

```
<210> 31
<211> 8
<212> PRT
<213> Artificial Sequence
```

```
<220>
<223> peptide that binds to erd2 receptor
```


Ser Glu Lys Asp Glu Leu
130

<210> 35
<211> 444
<212> DNA
<213> Artificial Sequence

<220>
<223> KDEL-myc

<400> 35
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cgggccgagg gatccgaaca aaaacttatt tctgaagaag acttgtagca cccaaactca 120
acatgcggat ccagcctggg tggagactgt tgtccacaga tgcttcgaga actccaggag 180
actaatgcgg cgctgcaaga cgtgagagag ctcttgcgac agcagggtcaa ggagatcacc 240
ttcctgaaga atacggtgat ggaatgtgac gcttgcgga tgcagcccg cgcaccccc 300
ggtactagtc cgcagccgca gccgaaaccg cagccgcagc cgcagccgca gccgaaaccg 360
cagccgaaac cggaaccgga aggtaccgga tcatcagaaa aagatgagtt gtaggcggcc 420
gcagaattcc atatgcatct cgag 444

<210> 36
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> human myc tag

<400> 36
Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu
1 5 10

<210> 37
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> recognition sequence of KDEL receptor

<400> 37
Lys Asp Glu Leu
1

<210> 38
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> binds to KDEL receptor

005001 02030300

1. 1. The first
 2. 2. The second
 3. 3. The third
 4. 4. The fourth
 5. 5. The fifth
 6. 6. The sixth
 7. 7. The seventh
 8. 8. The eighth
 9. 9. The ninth
 10. 10. The tenth
 11. 11. The eleventh
 12. 12. The twelfth
 13. 13. The thirteenth
 14. 14. The fourteenth
 15. 15. The fifteenth
 16. 16. The sixteenth
 17. 17. The seventeenth
 18. 18. The eighteenth
 19. 19. The nineteenth
 20. 20. The twentieth
 21. 21. The twenty-first
 22. 22. The twenty-second
 23. 23. The twenty-third
 24. 24. The twenty-fourth
 25. 25. The twenty-fifth
 26. 26. The twenty-sixth
 27. 27. The twenty-seventh
 28. 28. The twenty-eighth
 29. 29. The twenty-ninth
 30. 30. The thirtieth
 31. 31. The thirty-first
 32. 32. The thirty-second
 33. 33. The thirty-third
 34. 34. The thirty-fourth
 35. 35. The thirty-fifth
 36. 36. The thirty-sixth
 37. 37. The thirty-seventh
 38. 38. The thirty-eighth
 39. 39. The thirty-ninth
 40. 40. The fortieth
 41. 41. The forty-first
 42. 42. The forty-second
 43. 43. The forty-third
 44. 44. The forty-fourth
 45. 45. The forty-fifth
 46. 46. The forty-sixth
 47. 47. The forty-seventh
 48. 48. The forty-eighth
 49. 49. The forty-ninth
 50. 50. The fiftieth
 51. 51. The fifty-first
 52. 52. The fifty-second
 53. 53. The fifty-third
 54. 54. The fifty-fourth
 55. 55. The fifty-fifth
 56. 56. The fifty-sixth
 57. 57. The fifty-seventh
 58. 58. The fifty-eighth
 59. 59. The fifty-ninth
 60. 60. The sixtieth
 61. 61. The sixty-first
 62. 62. The sixty-second
 63. 63. The sixty-third
 64. 64. The sixty-fourth
 65. 65. The sixty-fifth
 66. 66. The sixty-sixth
 67. 67. The sixty-seventh
 68. 68. The sixty-eighth
 69. 69. The sixty-ninth
 70. 70. The seventieth
 71. 71. The seventy-first
 72. 72. The seventy-second
 73. 73. The seventy-third
 74. 74. The seventy-fourth
 75. 75. The seventy-fifth
 76. 76. The seventy-sixth
 77. 77. The seventy-seventh
 78. 78. The seventy-eighth
 79. 79. The seventy-ninth
 80. 80. The eightieth
 81. 81. The eighty-first
 82. 82. The eighty-second
 83. 83. The eighty-third
 84. 84. The eighty-fourth
 85. 85. The eighty-fifth
 86. 86. The eighty-sixth
 87. 87. The eighty-seventh
 88. 88. The eighty-eighth
 89. 89. The eighty-ninth
 90. 90. The ninetieth
 91. 91. The ninety-first
 92. 92. The ninety-second
 93. 93. The ninety-third
 94. 94. The ninety-fourth
 95. 95. The ninety-fifth
 96. 96. The ninety-sixth
 97. 97. The ninety-seventh
 98. 98. The ninety-eighth
 99. 99. The ninety-ninth
 100. 100. The hundredth

1

<213> Artificial Sequence

<223> binds to KDEL receptor

1

5

<213> Ratus ratus

1

<213> Ratus ratus

$$\langle 222 \rangle \quad (0) \dots (0)$$

1

<213> Mus musculus

1